



Patient:
DOB:
Sex:
MRN:

3534 Methylation Panel - Plasma & Whole Blood

Interpretation At-a-Glance

Methylation

- Homocysteine ▲
- SAH ▲
- SAM ▲
- Choline ▲
- Betaine ▲
- DMG ▲
- Sarcosine ▲



Transsulfuration

- Glutathione ▼
- Cystathionine ▲
- Cysteine ▲



Methylation Status

SAM/SAH Ratio

Low

High

Methylation Balance

Un-methylated
Metabolites

Methyl Group
Donors

Met/Sulf Balance

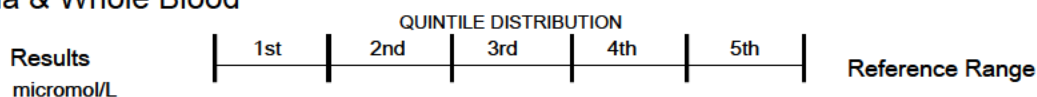
Transsulfuration

Methylation



3534 Methylation Panel - Plasma & Whole Blood

Methodology: LCMSMS & Colorimetric



Methylation Capacity

Ratios

1. Methylation Index (SAM/SAH Ratio)	3.3		2.2-6.4
2. Methylation Balance Ratio	1.04		1.03-1.20
3. Met/Sulf Balance Ratio	0.63		0.55-0.64
4. Betaine/Choline Ratio	5.2		2.6-7.7

Methyl Group Donors

5. S-adenosylmethionine (SAM)	137		65-150 nanomol/L
6. Methionine	30		23-38
7. Choline	12.0		5.2-13.0
8. Betaine	62		21-71
9. Serine	125		91-161

Methyl Group Metabolites

10. S-adenosylhomocysteine (SAH)	41		16-41 nanomol/L
11. Homocysteine †	12.0	H	3.7-10.4
12. Dimethylglycine (DMG)	5.0		1.6-5.0
13. Sarcosine	6,485		3,670-6,743 nanomol/L
14. Glycine	317		181-440

Transsulfuration Metabolites

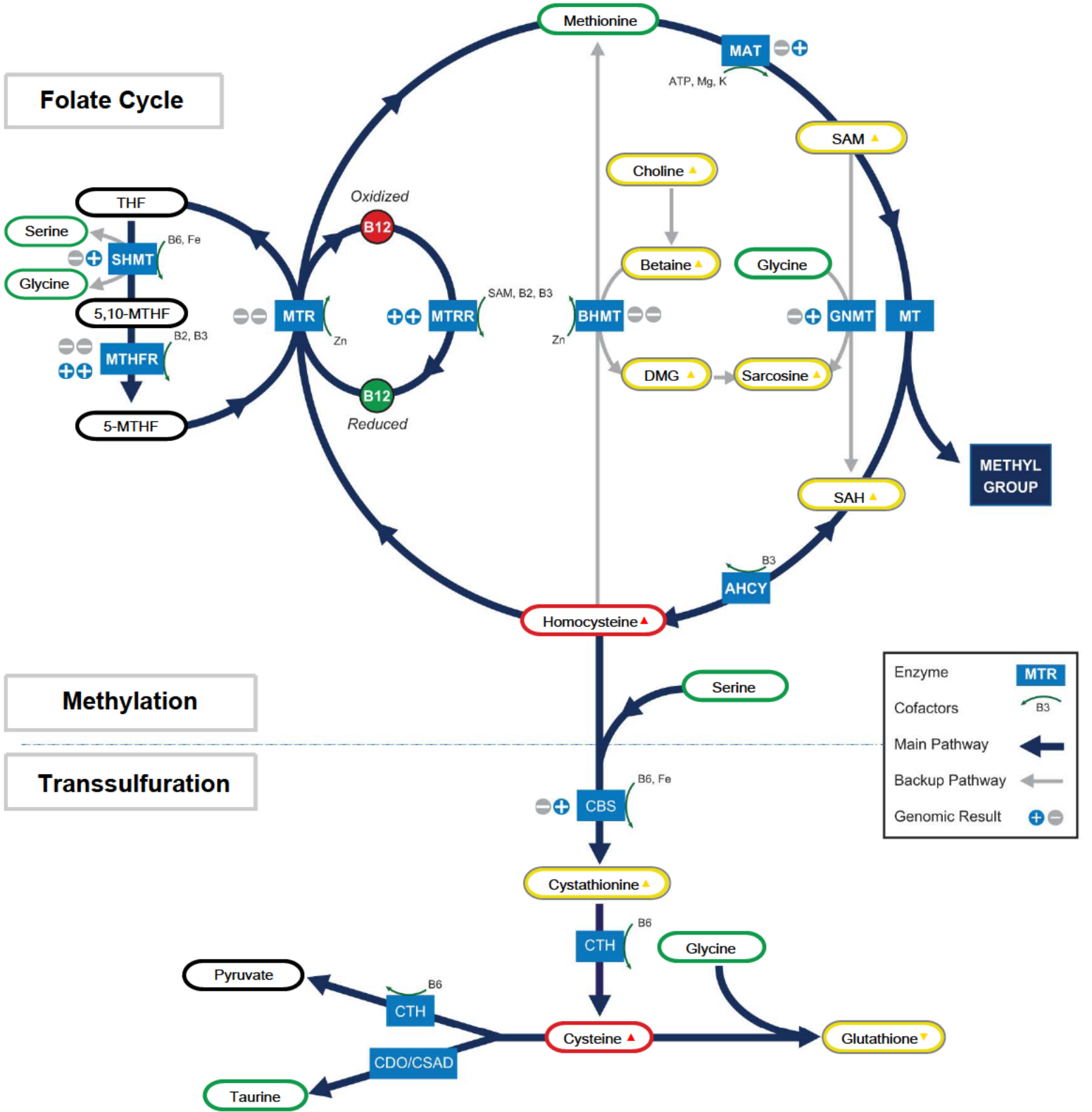
15. Cystathionine	321		74-369 nanomol/L
16. Cyst(e)ine	439	H	271-392
17. Taurine	104		50-139
18. Glutathione †	836		>=669

†These results are not represented by quintile values.

Tests were developed and their performance characteristics determined by Genova Diagnostics. Unless otherwise noted with *, the assays have not been cleared by the U.S. Food and Drug Administration.



Methylation / Transsulfuration Pathway



Energy Production

Detoxification